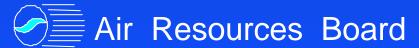
RESEARCH PROPOSALS

March 2004

California Environmental Protection Agency



Effect of GSTM1 Genotype on Ozone-Induced Allergic Airway Inflammation

University of California, San Francisco
Dr. Colin Solomon
\$497,990 (42 months)

- Objective: Determine whether ozone exposure enhances allergic responses in asthmatics to allergen and whether the GSTM1 genotype is a predictor of susceptibility to health effects.
- Expected Results: Identification of biological basis for differential responses among allergic asthmatics exposed to ozone and allergen.

Determination of Reactive Oxygen Species Activity in PM and Enhanced Exposure Assessment for the NIH/NIEHS Study Entitled: Ultrafine PM and Cardiorespiratory Health

University of California, Irvine
Dr. Ralph Delfino
\$676,814 (36 Months) Co-funded by SCAQMD

- Objective: Determine health impacts of ultrafine particulate matter on elderly people in the South Coast Air Basin.
- Expected Results: Definition of how air pollutants are related to cardiovascular health outcomes among a sensitive population.

Development of a Micro Air Particulate Analyzer for Ubiquitous Deployment in Air Quality Monitoring and Epidemiological Studies

University of California, Davis
Dr. Debbie Niemeier
\$225,310 (24 Months)
Co-funded by CEC

- Objective: Build an inexpensive, portable instrument to measure the size distribution of PM.
- Expected Results: A device that can enable PM size characterization for community studies.

Evaluation of Mechanisms of Exhaust Intrusion into School Buses and Feasible Mitigation Measures

University of California, Riverside Dennis Fitz \$299,999 (24 Months)

- Objective: Investigate school bus self-pollution and explore mitigation measures to reduce children's exposure to exhaust.
- Expected Results: An understanding of how to buses typically allow exhaust intrusion and measures to reduce it.

Evaluation of the Heavy-Duty Diesel Engine Not-to-Exceed (NTE) Regulation

University of California, Riverside Dr. J. Wayne Miller \$400,000 (20 Months) Small co-funding by U.S. EPA

- Objective: Evaluate on-board emission measurement systems used to implement the NTE regulation
- Expected Results: Data to ensure heavy-duty diesel engines meet the NTE standards.

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